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<p>(54) Title: METHOD, SYSTEM AND BUSINESS MODEL FOR PERFORMING AN AUCTION</p>		
<p>(57) Abstract</p> <p>The present invention relates generally to a method, a system and a business model for performing sale of products. The products may be new goods, secondary market goods, services, collectibles etc.. The present invention relates more particularly to implementing auctions with the telecommunications media. One idea of the present invention is providing an auction where information on the products in sale and the offers is transferred to potential buyers via an electronic mass media such as television. The auction management system advantageously comprises a display screen (202) for showing said information on the products. This display screen can be imaged with video cameras (205) for broadcasting on television (209, 208, 216). This enables to create an entertaining auction program, where there is a display screen provided for a real time information on the products and offers. The user can advantageously make offers using short message service of a mobile communications system (214, 250, 260, 262, 280, 290). The user of the auction service does not need to have a continuous telephone connection to the service provider. The user does neither need to make specific agreements with the service provider or a bank for the purchase payments in order to use the auction service.</p>		

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## METHOD, SYSTEM AND BUSINESS MODEL FOR PERFORMING AN AUCTION

### 5 Field of the Invention

The present invention relates generally to a method, a system and a business model for performing sale of products. The products may be new goods, secondary market goods, services, collectibles etc. The present invention relates more particularly to 10 implementing auctions with telecommunications media.

### Background of the invention

It is well known to arrange auctions with an auctioneer and an audience of potential 15 buyers. However, it may take much time to travel to the auctions and, if the products in sale are not attractive, the travelling and the time used by the potential buyer may be wasted. In order to be able to do shopping and take part in auctions at home, electronic sale services has been developed.

20 Most systems for processing the electronic sale of products are seller-driven, whereby the seller prices, packages, configures and offers the product for sale, and the buyer decides whether or not to accept the seller's offer. It is also prior known to arrange electronic auctions, wherein a seller and/or a buyer can make offers to sell/buy a determined product. When the offers to sell and buy meet, a transaction is 25 recorded between the seller and the buyer. For example, the auction management system may process each received buying offer to determine whether one or more counterparts are willing to accept the offer. If a seller accepts a given purchase offer, and ultimately delivers goods complying with the buyer's offer, the buyer is bound on behalf of the accepting seller, to form a legally binding contract. A 30 purchase offer thus is a binding offer containing one or more conditions.

In order to guarantee the buying offers the buyers may have, for example, a 35 general-purpose account, such as a credit or debit account. The buyer must therefore have an agreement with a bank and the auction service provider for the payment of purchases. On the other hand, the delivery and quality of the products to be sold can be guaranteed by the dealer/authenticator which can be part of the auction management system or another third party having knowledge of the subject goods.

The dealer/authenticator may also serve as the distribution point for the products. A prior art system for implementing electronic sale is disclosed in patent application document WO 99/23595.

5 Figure 1 illustrates a prior art purchase management system 100 for receiving and processing conditional purchase offers (CPOs) for collectibles from one or more buyers, such as buyers 110 and 120. The CPO management system 100 processes each received CPO to determine whether one or more sellers, such as sellers 130 and 140, are willing to accept a given CPO. If a seller accepts a given CPO, and  
10 delivers goods complying with the buyer's CPO, the collectible CPO management system 100 binds the buyer 110 on behalf of the accepting seller 130, to form a legally binding contract.

15 Once a CPO is accepted, but prior to completing the transaction, the goods are preferably forwarded to a dealer/authenticator, such as dealer/authenticator 150 or 160, for evaluation. The dealer/authenticator 150 can be part of the collectible CPO management system 100 or another third party having knowledge of the subject goods. The dealer/authenticator 150 preferably validates, authenticates and optionally guarantees the goods, while also serving as the distribution point for the goods sold by the CPO management system 100. As used herein, validation establishes that the item actually exists. Authentication proves that the item is in the condition stated by the seller. The guarantee, if desired, insures that the buyer has not purchased a fake or counterfeit item. Thus, once an item is delivered to the dealer/authenticator 150 and approved, the dealer/authenticator 150 can deliver the item to the buyer and authorize payment to the accepting seller.  
25

30 The collectible CPO management system 100 allows a number of sellers to conditionally accept each CPO. In this manner, the collectible CPO management system 100 ensures that at least one of the accepting sellers will have the collectible item in the condition specified by the buyer. Preferably, each of the accepting seller(s) are prioritized into a hierarchy based on predetermined criteria. For example, sellers may be assigned a priority in the hierarchy based on the order in which their acceptances are received by the CPO management system 100. Alternatively, priority may be determined based on the geographical proximity of  
35 each accepting seller to the buyer. In addition, the priority may be based on the performance of each accepting seller for previous transactions.

A CPO is thus a binding offer containing one or more conditions submitted by a buyer for the purchase of goods, at a buyer-defined price. The CPO may be guaranteed, for example, using a generalpurpose account, such as a credit or debit account, maintained by an issuing bank, such as issuing bank 170 and 180. The 5 conditions specified in a CPO may also include, for example a description of the goods and a required quality.

As shown in FIG. 1, the CPO management system 100 includes a central controller 190 for processing the information in a manner described above.

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Each buyer and seller contacts the CPO management system 100, for example, by means of telephone line, in-person contact or through an agent, and provides the CPO management system 100 with the terms of their CPOs, or the list of available items the seller desires to sell, as appropriate. Each buyer and seller may employ a 15 general-purpose computer, for communicating with the collectible CPO management system 100. The general-purpose computer of each buyer and seller is preferably comprised of a processing unit, a modem, memory means and any software required to communicate with the collectible CPO management system 100.

20

There are certain drawbacks related with the described prior art solutions to implement an electronic auction. The communication between the auction management system and the user is carried out via a telephone line. The user may have a computer with a modem, and the user makes a call to the auction service provider. In order to get information on the products that are in sale and in order to make offers, the user needs to have continuous telephone connection to the auction management system. A continuous connection further causes high expenses to the user. It also takes a lot of time for the user to follow the auction, and if the communication is made with the user's computer, the user has to stay by the 25 computer for long periods. One solution could be using mobile terminals with wireless modems. However, this only makes it possible to follow the auction in different places, but the user still has to stay with the computer for long periods. The wireless data connections also tend to be even more expensive than data 30 connections on a fixed telephone line. One possibility could also be to make short connections every now and then, but the drawback with this solution is that the right 35 instant to make an offer for a product may be missed.

Another drawback with the electronic sale services in the Internet is that they are often not pleasant for all users. Even if the Internet services have gained popularity, many people do not find attractive to communicate with a computer system for long periods.

5

A further problem is related to authentication of a buyer. Since the user may make binding offers through this telephone connection, there must be an authentication procedure before accepting the user to the electronic sale service. Before this kind of an authentication procedure is possible, there must be an agreement between the 10 user and the electronic sale provider, and the electronic sale provider must give security codes for establishing the connections. A further problem with the prior art solutions is that one needs to have a payment agreement with the auction service provider and a bank as described above. Therefore it may be too troublesome for ordinary potential users to try and start using the auction services.

15

#### Summary of the Invention

The objective of the present invention is to create a solution for providing auctions wherein the above mentioned problems of the prior art solutions are reduced or 20 avoided.

One idea of the present invention is providing an auction where information on the products in sale and the offers is transferred to potential buyers via an electronic mass media such as television. The auction management system advantageously 25 comprises a display screen for showing said information on the products. This display screen can be imaged with video cameras for broadcasting on television. This enables to create an entertaining auction program, where there is a display screen provided for a real time information on the products and offers. "Electronic mass media" means here communications where a certain program is broadcasted to several receivers of the electronic broadcasting channel. The electronic mass media 30 is advantageously one transferring moving video image such as television.

The communication from the user to the auction management system can be accomplished by sending digital messages with some user dedicated 35 communications. "A user dedicated communication" means here electronic communications where the receiving auction management system can identify the customer or subscriber sending the message. This communication may be eg. short

message service (SMS) of a mobile communications system, an authenticated Internet connection, email, etc.. Short messages can be transferred from a mobile phone to the mobile communications center in order to transmit conditional purchase offers, and also short messages from the mobile communications center to the mobile phone can be used for accepted offers. The communication between the mobile center and the auction management system can also be based on short messages, or some other type of data connection.

A short message service means in this context a service of transferring data messages without creating a continuous point-to-point connection. A short message service is available in new digital mobile communication systems. An example of such a system is the GSM (Global System for Mobile communications).

The inventive solution has several advantages over the prior art solutions. The auction can be made a very entertaining online program using electronic mass media, and the viewers can have an immediate access to the auction. The user is able to view an auction wherever there is the concerned TV channel available and where there is a mobile communications system coverage. A user does not need to make a continuous data connection to the auction management system. The user can also get instant information on a possible acceptance of a user's offer. And if the user wishes to make a new conditional purchase offer, the user can send in real time a short message with the required offer information. There is no need to make a new data transfer connection involving possible unsuccessful attempts causing a harmful delay in transmitting the offer.

A further advantage with the present invention is that the payment of the bought products can be confirmed by a mobile system operator. When an offer is made with a short message, the mobile system operator and the auction service provider gets the phone number of the subscriber connection where the short message has been sent. This is confirmed information on the subscriber and can therefore be used for confirming the buyer. The payment can be added in the subscriber's telephone bill or the auction service provider can use the subscriber information for sending an invoice to the buyer. Therefore there is no need for separate payment agreements between a user, the auction service provider and a bank. The only agreement that may be needed is an agreement between the auction service provider and a mobile system operator for transaction of the payments. The user can therefore start trying and using the auction service without any additional

agreements. This is important for getting the large numbers of television viewers to attend to the auction.

5 The present invention concerns also a business model for arranging an auction in the described manner.

The characterising features of the present invention are as follows:

A method for performing an electronic auction, comprising the steps of:

10 providing several potential buyers with information on a product in sale;  
obtaining a purchase offer for a product from a potential buyer;  
transferring the information on the purchase offer from the potential buyer to an auction management system;  
providing an acceptance of said purchase offer;  
15 wherein the step of transferring the information on the purchase offer from the potential buyer to the system is provided with a digital message on user dedicated communications,  
the potential buyers are provided with information on a product in sale using electronic mass media.

20

A system for performing electronic auctions, comprising:

means for providing at least one potential buyer with information on a product in sale;  
means for obtaining a purchase offer for a product from a potential buyer;  
25 means for receiving the information on the purchase offer from the potential buyer to an auction management system;  
means for providing an acceptance of said purchase offer;  
wherein the means for receiving the information on the purchase offer from the potential buyer to the system is means for receiving a digital message on user dedicated communications, and  
30 the potential buyers are provided with information on a product in sale using electronic mass media.

35 A business model for performing an auction using telecommunications media, comprising the steps of:

providing several potential buyers with information on a product in sale;  
obtaining a purchase offer for a product from a potential buyer;

transferring the information on the purchase offer from the potential buyer to an auction management system;

providing an acceptance of said purchase offer;

wherein the step of transferring the information on the purchase offer from the potential buyer to the system is provided with a digital message on user dedicated communications,

the potential buyers are provided with information on a product in sale using mass media.

10 Preferred embodiments of the present invention are described in the dependent claims.

15 A more complete understanding of the present invention, as well as further features and advantages of the present invention, will be obtained by reference to the following detailed description and drawings.

Brief Description of the Drawings

20 FIG. 1 is a schematic block diagram illustrating a prior art collectible conditional purchase offer (CPO) management system;

FIG. 2 is a schematic block diagram illustrating an exemplary electronic auction system according to the invention; and

25 FIG. 3 illustrates a flow diagram for an exemplary method for providing an electronic auction according to the invention until the acceptance of a conditional purchase offer,

30 FIG. 4 illustrates a flow diagram for an exemplary method for providing an electronic auction according to the invention starting from the acceptance of a conditional purchase offer, and

FIG. 5 illustrates an example of a short message for transmitting a conditional purchase offer according to the invention.

Detailed Description

Figure 1 was described in the prior art section of the specification.

5 Figure 2 illustrates an exemplary embodiment of an auction arrangement in accordance with the invention. The auction takes place in a TV studio, where there may also be audience. There is a stage 203 for the anchor(s) 204 of the auction show. There is also a large display screen 202 on the stage where the information on the products in sale, as well as the offered prices, are displayed. The auction show is 10 imaged with a TV/video camera 205, and the show is further broadcasted, 206, 209, on an electronic mass media such as television channel 208. The display screen of the auction stage is controlled by the auction management system 230, and the display can therefore give a real time information on the products and offers for all viewers of the broadcast channel.

15

A person who attends to the auction can watch the auction from the television 216. If the person wants to make an offer on some product in sale, the offer can be transmitted to the auction management system with a user dedicated communication. The exemplary auction management system includes connection 20 ports for both Internet terminals and for mobile stations. A user 210 with an Internet terminal 212 send offers to the electronic auction management system 230 via the Internet 240. The communication is, as in usual Internet connections, using HTTP and TCP/IP protocols. The auction management system 230 includes an MS SQL server 7 (234) and an MS IIS 4 Web-server (232). The communication between the 25 Internet terminal and the electronic auction management system can be implemented according to the prior art.

A customer 210 that attends to the auction with a mobile station 214 connects to a mobile communication system and sends the offer information to the auction management system with a short message. The customer can then immediately see 30 the offer being entered to the display screen of the auction stage.

The mobile station has a wireless signalling link to one of many base stations 262, further connected to a base station controller of the mobile communication system. 35 A mobile communication system generally also includes mobile switching centers that interconnect the base station controllers into a mobile communication net 260.

The mobile communication system has also registers with e.g. subscriber information. Together with these registers the operator 280 of the mobile system provides a Short Message Services Center (SMSC) for storing and conveying the short messages. The short messages are further transferred 290 between the mobile

5 communication system and the electronic auction management system 230. The transfer can take place via the Internet 240 or some other communication link. The information may be transferred between the mobile communication system and the electronic auction management system in the form of short messages, or in some other form.

10 It is clear that the electronic auction management system may comprise communication ports for many mobile communications systems that are provided by different operators. These mobile communications systems may also have different communications standards such as GSM, GPRS or UMTS. Most digital mobile

15 communications systems provide a short message service that is based on short messages that are transferred in the form of signalling without forming a continuous call connection.

20 The subscriber registers of a mobile communications system include information on accumulated value of calls for billing the subscribers. Except calls, the accumulated values may include payments also for other services or products. A user of a mobile phone can thus buy products by calling to a certain telephone number, and the price of the call then includes the price of the bought product. The provider of the electronic auction services may therefore have an agreement with the mobile system

25 operator according to which the payments of the purchases are added to the accumulated value of calls/messages of the subscriber. Even if the payments are not directed through the mobile communications system operator, the auction service provider can use the information of the short message to authenticate the sender of the message and use it in a direct billing procedure.

30 The functional units in figure 2 are not explained in more detail, as they can be designed by a person skilled in the art using this description of the basic inventive idea. Also functional details as described with figure 1 can be applied. One should also note that the "electronic auction management system" may in the simplest form

35 be just a receiver device for receiving digital messages and showing the offers on the screen. The purchase transactions can then be made manually, if this is desirable.

Figure 3 illustrates a flow diagram of an exemplary method 300 for providing an auction according to the invention. First in step 310 the auction service provider determines a product for sale in the auction. The seller of the product usually also determines an upset price or "starting price", below which the product can not be sold. This information is stored in the auction management system.

After the product in sale has been determined, the auction management system enters the information on the product on a display screen on the auction stage, step 320. This information may include a product type, an auction item code, and an upset price. The auction stage is further video imaged with e.g. a television camera, and the program is broadcast on an electronic mass media, such as television channel. This way the information on the auction display screen is transmitted to the viewers of the mass media program, step 330.

If a viewer wants to take part in the auction a user of a mobile station may, for example, send an initial short message to the auction management system informing that the user wants to take part in the auction (this step is not shown in the flow diagram). After receiving this initial message, the auction management system enters the mobile station identity information in said list. It is also possible that no registration of a user is required.

When a potential buyer sees information on a product in sale, the buyer evaluates whether an offer should be made, step 330. If the viewer does not find the product information attractive, step 350, the viewer may remain waiting for new products for sale, step 352. When a new product comes for sale, steps 354, 310, the same steps as described above are repeated.

In step 340 the buyer may find the product information attractive but may still want to follow the offers of other buyers before making an offer, steps 350-354. When the buyer then decides to make an offer for the product the buyer writes a short message according to a determined form that includes information on the new offer and the product, step 360. If there is just one product in sale, it may be unnecessary to identify the product in the short message for the offer. The short message is then transmitted from the buyers mobile station to the auction management system. The information of the short message is then read and stored in the register of the auction management system. It is also possible to use other ways to send a digital message including the offer information, such as the Internet.

After the buyer has transmitted an offer to the auction management system, it may happen that some other buyer gives a better offer for the product and the offer of said buyer is not accepted, step 390. In such a case the buyer has to make a new evaluation and decision on whether to give a next offer or not, step 340.

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If there are no better offers, a decision can be made that the buyer's offer is accepted. The decision can be made by the auction management system on certain predetermined conditions, by the auctioneer or by the seller of the product. It may be helpful for the anchor/auctioneer, if the decision is made by the system. However, 10 the auction program may be more entertaining, if the decisions are made by the auctioneer. If the decision is made by the system, the auction management system may wait for a determined time period after an offer has been made, and, if there are no better offers given on that time period, the auction management system accepts the offer. Another possibility is that the acceptance is programmed to take place on a 15 determined time instant. Whoever then has the highest offer at that moment will have the offer accepted.

Figure 4 illustrates a flow diagram on steps after the acceptance of the offer in the method of Fig. 3. After the auction management has accepted the offer, the 20 corresponding buyer is informed on the acceptance. One possibility is to give the information on the auction program via the mass media. However, there may be a need to transmit an acceptance message to the buyer the receipt of which can be confirmed. The message can be transferred by e.g. a short message or via the Internet/email. In the method of figure 4 the auction management system forms a 25 short message with the information on acceptance of the offer, step 410. The auction management system then transmits the short message to the mobile station of the buyer thus indicating that the offer has been accepted, step 420.

It is important that there is a way for binding the buyer with the accepted offer to 30 purchase said product. The auction service provider may identify the buyer's payment and delivery information based on the short message that included the accepted offer. The short message usually includes the telephone number of the subscribers mobile station. The auction service provider may get the name and address of the subscriber from the operator of the mobile communications system or 35 the auction service provider may have its own list of subscriber information.

Since the short message from the buyer includes a certified telephone number of the subscriber, it is possible to carry out the billing procedure, step 440, and delivery of the products, step 450, the without any complicated authentication of users of the auction service.

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Figure 5 illustrates an example on a short message that can be used for transmitting an offer to the auction management system according to the invention. The short message comprises a first identifier field 510 for identifying the product that the offer is made for. This identifier field may not be needed, if there is just one item for 10 sale at any time. A second identifier field 530 includes the monetary amount that is offered for the product. A third identifier field 550 includes information for authenticating the buyer. This identifier field may not be needed, if the buyer making the offer is identified in some other way, such as the subscriber identifier that is transmitted together with the short message data. It is also possible to use 15 more than one method for authenticating the user in order to achieve a high degree of security.

The identifier fields are separated with separating characters 520, 540. In this 20 example the separating character is ":". The separating character can be any predetermined character or it may consist of more than one successive characters.

The short message in this example has a maximum length of 160 characters. Usually all this data space is not needed for the offer data, so there is unused data space in the short message, 560. There may also be other ways to recognize the identifier fields of the short message than using separating characters. One alternative 25 possibility is to use predetermined locations for the different identifier fields in the short message. However, this solution is more difficult for the user because one would need to check that all the input data is in its correct place in the short message.

30 As mentioned above, the short message usually includes, except the user input data, also information that identifies the subscriber connection where the short message is transmitted from, and information on the address (telephone number) where the short message is transmitted to.

35 As described above, the present invention gives remarkable advantages over prior art systems for implementing an electronic auction. When mass media is used in informing the user about the products in sale and currently valid offers, the user gets

the information instantly without any need to keep continuous telephone connection to the auction management system.

If short messages are used in making offers, the user can make an offer quickly  
5 without any need to make a telephone connection and authentication procedures. The user does not need to make special agreements with banks or the auction service provider in order to start using the auction service. The user can attend to the auction wherever the user's mobile phone is serviced. The user does not need to have a phone with Internet connection capabilities, and neither does the mobile  
10 communications system need to have a capability to provide Internet services.

It is to be understood that the embodiments and variations shown and described herein are merely illustrative of the principles of this invention and that various modifications may be implemented by those skilled in the art without departing  
15 from the scope and spirit of the invention. Especially, it is to be understood that the present invention is not in any way restricted to the mentioned communications systems. For example, the mass media for broadcasting an auction show may be, except television channel, eg. radio, the Internet or a broadcast channel of a mobile communications system. The idea of using short messages in making offers is not  
20 either restricted to the mentioned mobile communications systems, but it can be applied to any digital communications system with the ability to transfer short messages.

**Claims**

1. A method for performing an electronic auction, comprising the steps of:
  - 5 providing several potential buyers with information on a product in sale;
  - obtaining a purchase offer for a product from a potential buyer;
  - transferring the information on the purchase offer from the potential buyer to an auction management system;
  - providing an acceptance of said purchase offer;
  - wherein the step of transferring the information on the purchase offer from the potential buyer to the system is provided with a digital message on user dedicated communications,
  - 10 the potential buyers are provided with information on a product in sale using electronic mass media.
- 15 2. A method according to claim 1, wherein the user dedicated communications is short message service of a mobile telecommunications system.
3. A method according to claim 2, wherein the step of transferring the information on the purchase offer from the potential buyer to the system comprises
  - 20 the steps of:
    - forming a short message including information on a new offer of the potential buyer;
    - transferring said short message from the buyer to the system; and
    - reading said information from said short message for determining the purchase offer of said potential buyer.
- 25 4. A method according to claim 1, wherein the user dedicated communications is the Internet.
- 30 5. A method according to claim 1, wherein said information on a new offer of the potential buyer includes at least the following information:
  - product identifier,
  - offered monetary amount, and
  - buyer identifier.

6. A method according to claim 5, further comprising the step of initiating a payment of said purchase, and the use of said buyer identifier to collect funds from said buyer.
- 5 7. A method according to claim 1, wherein the information on a product in sale comprises product type and upset price or latest offer.
8. A method according to claim 1, wherein the mass media is television communications.
- 10 9. A method according to claim 1, wherein information on a product in sale and information on the current offer for the product are shown on a display screen of the auction management system.
- 15 10. A method according to claims 8 and 9, wherein the display screen is imaged by a television camera and the information on the display screen is thus transmitted to potential buyers via a television channel.
11. A method according to claim 1, wherein said product is a new article, a secondary market article, service or a collectible.
- 20 12. A method according to claim 1, wherein the acceptance of the purchase offer is based on a determined point of time.
- 25 13. A method according to claim 1, wherein the acceptance of the purchase offer is based on a determined time period after the receiving the latest purchase offer.
14. A method according to claim 3, wherein the purchase offer identifiers of the short message are recognised based on at least one separating character between two identifier fields.
- 30 15. A method according to claim 2, wherein the payment of the purchase is conveyed via a mobile system operator.
- 35 16. A method according to claim 2, wherein the buyer is identified on basis of an identifier of a subscriber connection in the mobile system, and said identifier is received from the mobile communications system within the short message.

17. A method according to claim 1, further comprising a step of transferring an initial short message from a mobile station to the auction management system and storing the mobile station identity information on a list of subscribers that take part in the auction.

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18. A method according to claim 17, further comprising a step of transferring a termination short message from a mobile station to the auction management system and removing the mobile station identity information from the list of subscribers that take part in the auction.

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19. A method according to claim 1, wherein the acceptance of an offer is informed to the corresponding buyer with a short message.

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20. A method according to claim 1, wherein the acceptance of an offer is informed with the mass media communications.

21. A system for performing electronic auctions, comprising:

means for providing at least one potential buyer with information on a product in sale;

20

means for obtaining a purchase offer for a product from a potential buyer;

means for receiving the information on the purchase offer from the potential buyer to an auction management system;

means for providing an acceptance of said purchase offer;

25

wherein the means for receiving the information on the purchase offer from the potential buyer to the system is means for receiving a digital message on user dedicated communications, and

the potential buyers are provided with information on a product in sale using electronic mass media.

30

22. A system according to claim 21, wherein the user dedicated communications is short message service of a mobile telecommunications system, and the system comprises one or more communications ports to receive short messages.

35

23. A system according to claim 22, wherein the means for receiving the information on the purchase offer from the potential buyer to the system comprises:

means for receiving a short message from the potential buyer to the system; and

means for reading information on a new offer of the potential buyer from said short message.

24. A system according to claim 21, wherein the user dedicated communications is  
5 the Internet and the system comprises one or more communications ports to receive  
a purchase offer via the Internet.

25. A system according to claim 21, wherein said information on a new offer of  
the potential buyer includes at least the following information:

10 - product identifier,  
- offered monetary amount, and  
- buyer identifier.

26. A system according to claim 25, further comprising means for initiating a  
15 payment of said purchase, and the use of said buyer identifier to collect funds from  
said buyer.

27. A system according to claim 21, wherein the information on a product in sale  
comprises product type and upset price or latest offer.

20 28. A system according to claim 21, wherein the mass media is television  
communications.

25 29. A system according to claim 1, comprising a display screen for showing  
information on a product in sale and information on the current offer for the  
product.

30 30. A system according to claims 28 and 29, comprising a television camera for  
imaging the display screen means for transmitting the image of the display screen to  
potential buyers via a television channel.

31. A system according to claim 15, wherein said product is a new article, a  
secondary market article, service or a collectible.

35 32. A system according to claim 21, comprising means for the acceptance of the  
purchase offer based on a determined point of time.

33. A system according to claim 21, comprising means for the acceptance of the purchase offer based on a determined time period after the receiving the latest purchase offer.

5 34. A system according to claim 23, comprising means for recognizing the purchase offer identifiers of the short message based on at least one separating character between two identifier fields.

10 35. A system according to claim 22, comprising means for conveying the payment of the purchase via the mobile system operator.

36. A system according to claim 21, comprising means for identifying the buyer on basis of an identifier of a subscriber connection in the mobile system received from the mobile communications system within the short message.

15 37. A system according to claim 21, further comprising means for transferring an initial short message from a mobile station to the auction management system and means for storing the mobile station identity information on a list of subscribers that take part in the auction.

20 38. A system according to claim 37, further comprising means for transferring a termination short message from a mobile station to the auction management system and means for removing the mobile station identity information from the list of subscribers that take part in the auction.

25 39. A system according to claim 21, comprising means informing on the acceptance of an offer to the corresponding buyer with a short message.

30 40. A system according to claim 1, comprising means for informing the acceptance of an offer the electronic mass media communications.

41. A business model for performing an auction using telecommunications media, comprising the steps of:  
providing several potential buyers with information on a product in sale;  
35 obtaining a purchase offer for a product from a potential buyer;  
transferring the information on the purchase offer from the potential buyer to to an auction management system;

providing an acceptance of said purchase offer;

wherein the step of transferring the information on the purchase offer from the potential buyer to the system is provided with a digital message on user dedicated communications,

5 the potential buyers are provided with information on a product in sale using mass media.

42. A business model according to claim 41, wherein the user dedicated communications is short message service of a mobile telecommunications system.

10

43. A business model according to claim 41, wherein the mass media is television communications and the auction is performed in a television program.

15

44. A business model according to claim 43, wherein the auction is run on a stage, the received purchase offers are displayed on a display screen which is located on the stage, and the stage with the anchor(s)/auctioneer(s) and the display screen is shown on the television program.

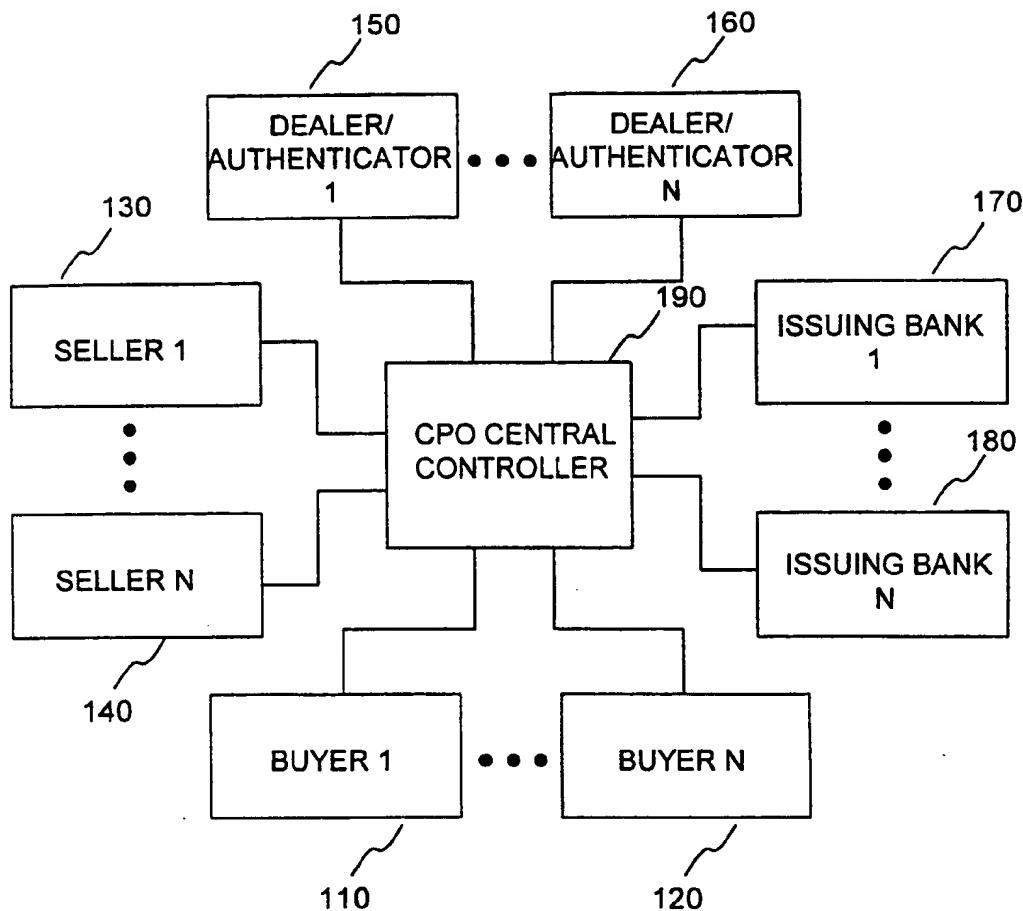


FIG. 1  
PRIOR ART

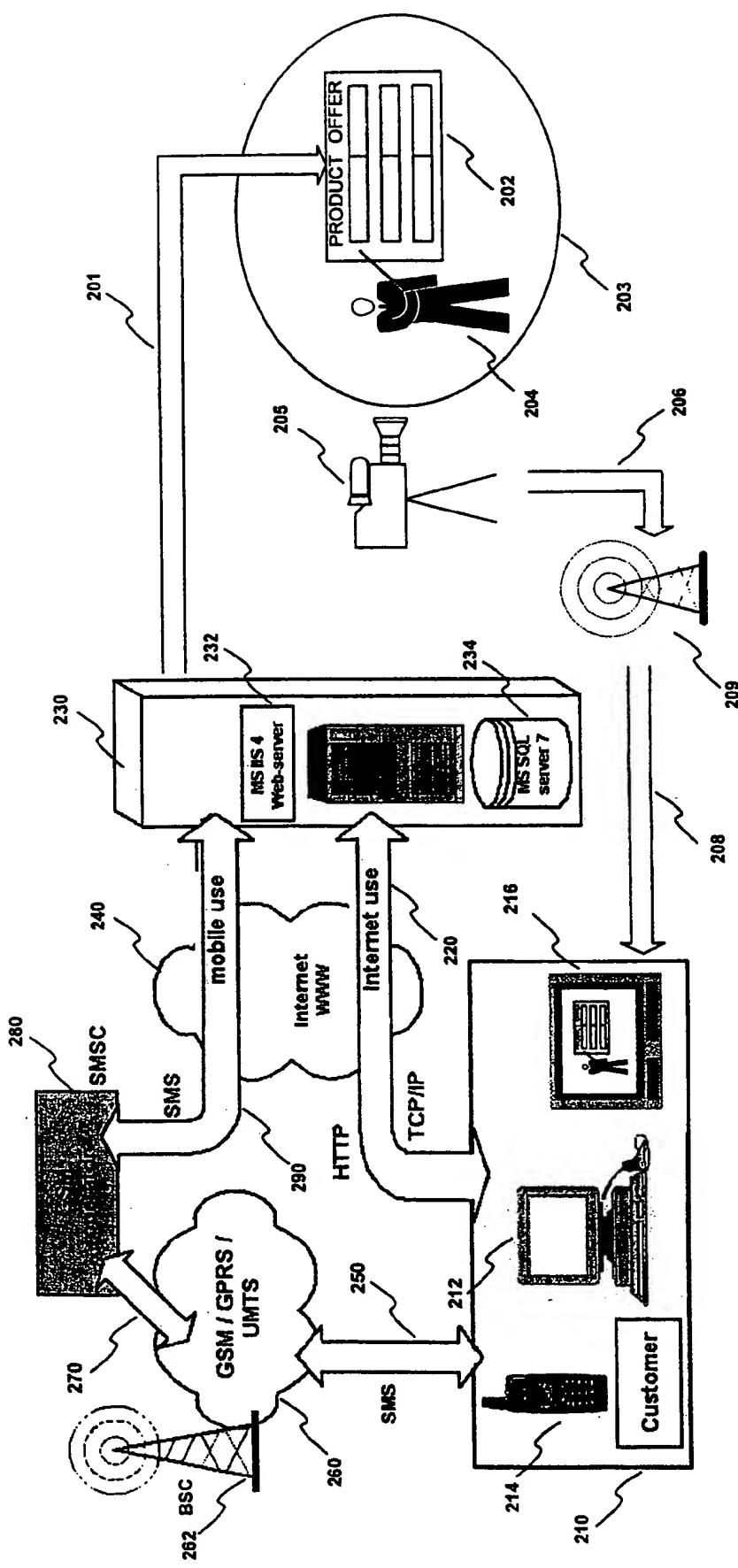


FIG. 2

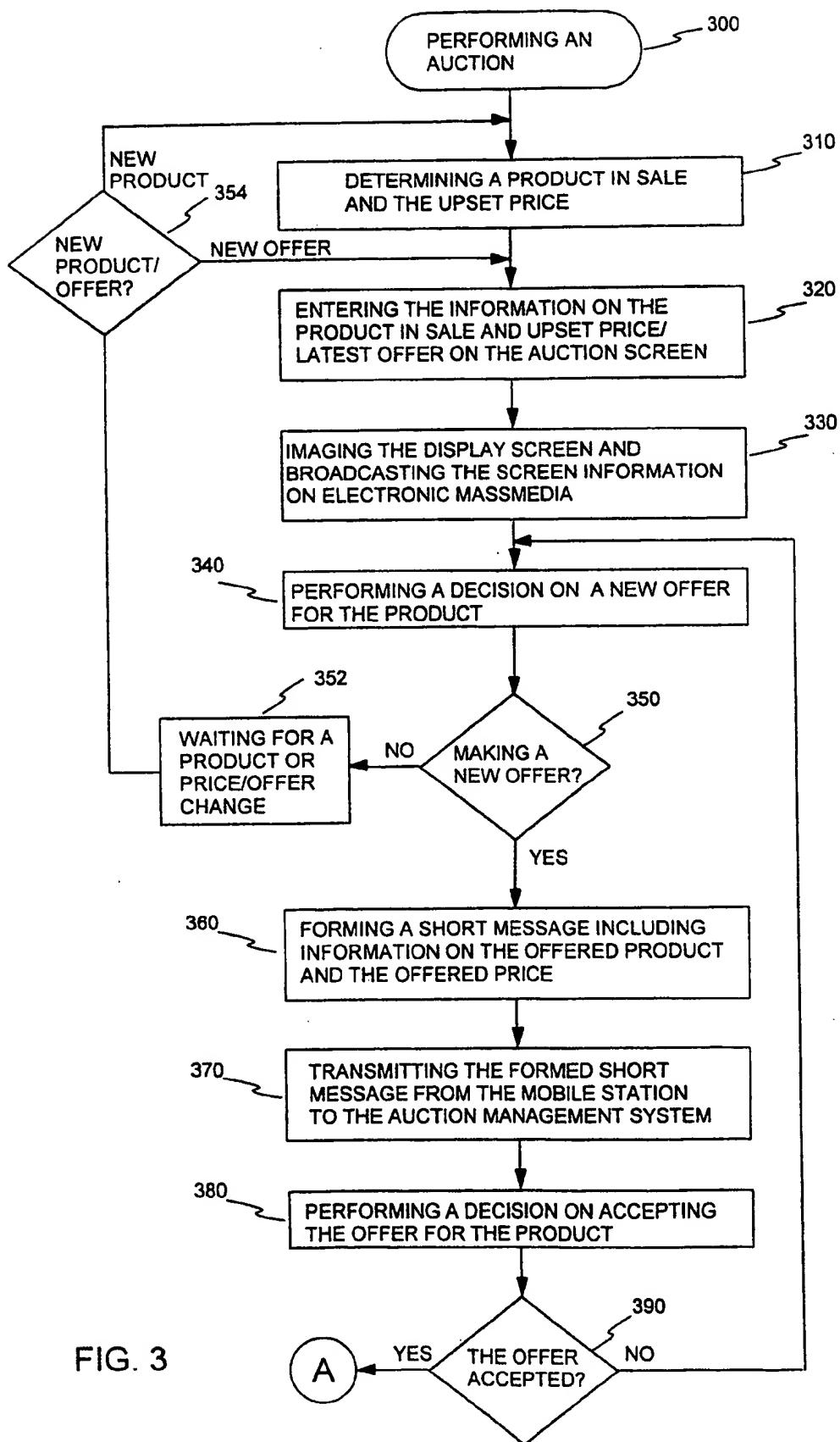


FIG. 3

4/4

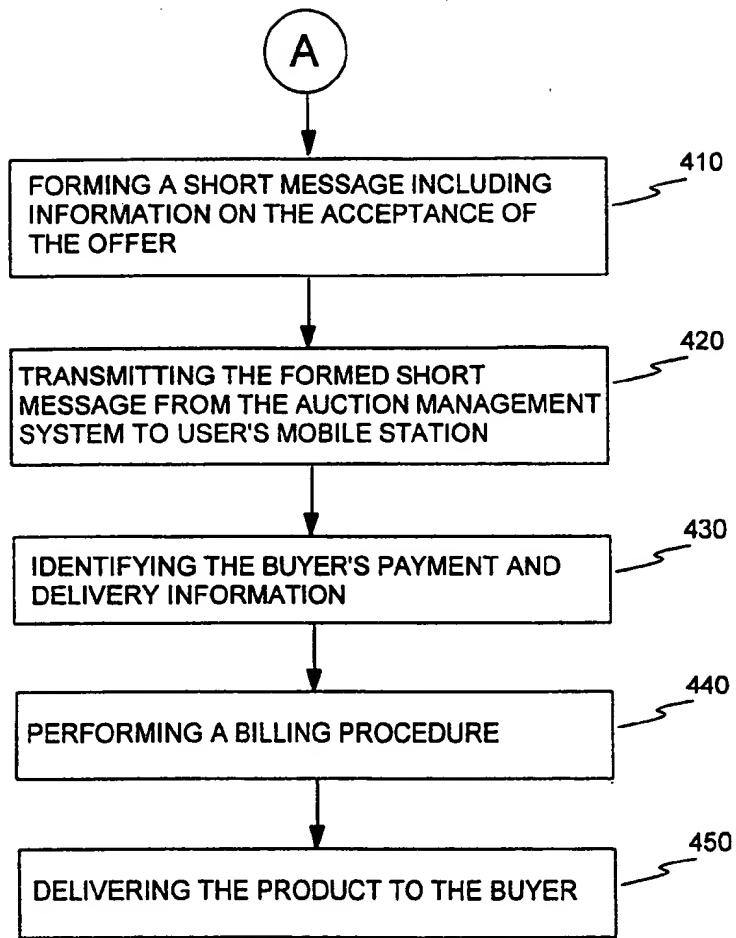


FIG. 4

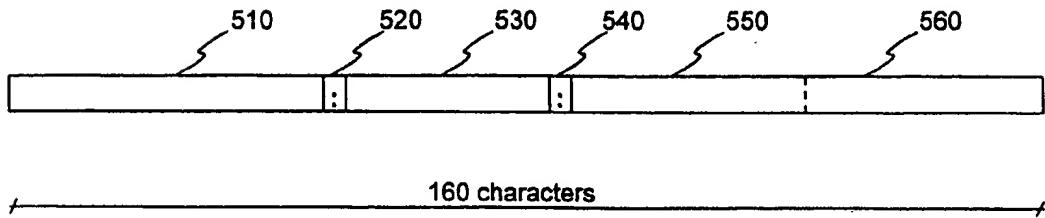
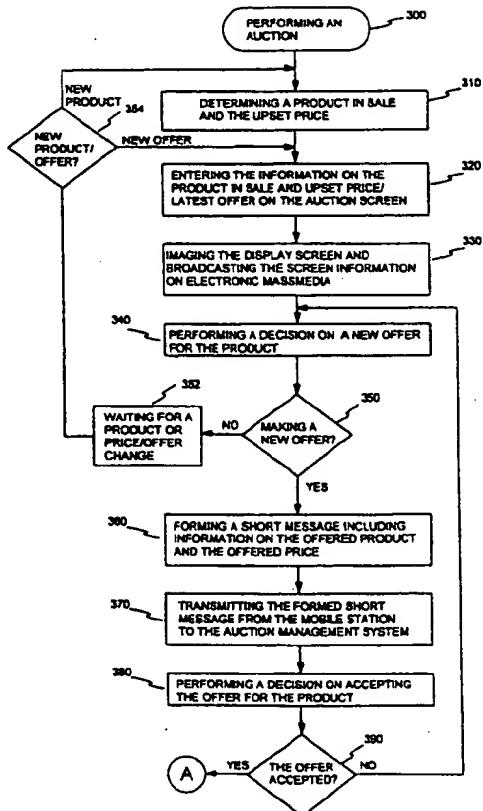


FIG. 5



## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification : <b>H04M 3/42, H04Q 7/22, G06F 17/60</b>		A3	(11) International Publication Number: <b>WO 00/22907</b>
			(43) International Publication Date: <b>27 April 2000 (27.04.00)</b>
<p>(21) International Application Number: <b>PCT/FI99/01025</b></p> <p>(22) International Filing Date: <b>10 December 1999 (10.12.99)</b></p> <p>(71) Applicant (<i>for all designated States except US</i>): <b>WCL WIRELESS COMMERCE LTD OY [FI/FI]</b>; Otakaari 20, FIN-02150 Espoo (FI).</p> <p>(72) Inventor; and</p> <p>(75) Inventor/Applicant (<i>for US only</i>): <b>KIVIMÄKI, Björn [FI/FI]</b>; Katriinantie 46, FIN-01760 Vantaa (FI).</p> <p>(74) Agent: <b>BERGGREN OY AB</b>; P.O. Box 16, FIN-00101 Helsinki (FI).</p>		<p>(81) Designated States: <b>AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</b></p> <p><b>Published</b>  <i>With international search report.</i>  <i>Upon the request of the applicant, before the expiration of the time limit referred to in Article 21(2)(a).</i></p> <p>(88) Date of publication of the international search report: <b>26 October 2000 (26.10.00)</b></p>	
<p>(54) Title: <b>METHOD, SYSTEM AND BUSINESS MODEL FOR PERFORMING AN AUCTION</b></p> <p>(57) Abstract</p> <p>The present invention relates generally to a method, a system and a business model for performing sale of products. The products may be new goods, secondary market goods, services, collectibles etc.. The present invention relates more particularly to implementing auctions with the telecommunications media. One idea of the present invention is providing an auction where information on the products in sale and the offers is transferred to potential buyers via an electronic mass media such as television. The auction management system advantageously comprises a display screen (202) for showing said information on the products. This display screen can be imaged with video cameras (205) for broadcasting on television (209, 208, 216). This enables to create an entertaining auction program, where there is a display screen provided for a real time information on the products and offers. The user can advantageously make offers using short message service of a mobile communications system (214, 250, 260, 262, 280, 290). The user of the auction service does not need to have a continuous telephone connection to the service provider. The user does neither need to make specific agreements with the service provider or a bank for the purchase payments in order to use the auction service.</p>			



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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/FI 99/01025

## A. CLASSIFICATION OF SUBJECT MATTER

IPC7: H04M 3/42, H04Q 7/22, G06F 17/60

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 5835896 A (FISHER ET AL.), 10 November 1998 (10.11.98), column 6, line 20 - line 65; column 6, line 13 - line 17; column 7, line 1 - line 8, abstract, column 9, line 60 - 67; column 10, line 1 - 5; column 13, line 25 - 55	1,4-7,9, 11-14,17-21, 24-27,29, 31-34,37-41
Y	--	2-3,15-16, 22-23,42
X	WO 9215174 A1 (BEAUMONT-MAXIN INTERNATIONAL LIMITED), 3 Sept 1992 (03.09.92), page 18, line 1 - line 25; page 19, line 1 - line 11, figure 1, abstract	1,5,7-11, 19-21,27-31, 39-41,43-44
Y	--	35-36

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PCT/FI 99/01025

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

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Y	WO 9719568 A1 (VAZVAN, BEHRUZ), 29 May 1997 (29.05.97), page 1 - page 3, abstract --	3,15-16,23, 35-36
Y	WO 9828900 A1 (GENERALDIREKTION PTT), 2 July 1998 (02.07.98), abstract --	2-3,16, 22-23,36,42
A	EP 0828223 A2 (HITACHI, LTD.), 11 March 1998 (11.03.98), abstract -- -----	

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

02/12/99

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PCT/FI 99/01025

Patent document cited in search report	Publication date	Patent family member(s)		Publication date
US 5835896 A	10/11/98	AU 2338397 A		22/10/97
		CA 2253543 A		09/10/97
		EP 0900424 A		10/03/99
		IL 126793 D		00/00/00
		WO 9737315 A		09/10/97
-----	-----	-----	-----	-----
WO 9215174 A1	03/09/92	CA 2061819 A		26/08/92
-----	-----	-----	-----	-----
WO 9719568 A1	29/05/97	FI 970767 A		20/10/97
-----	-----	-----	-----	-----
WO 9828900 A1	02/07/98	AU 1137197 A		17/07/98
		EP 0951774 A		27/10/99
		ZA 9711581 A		22/09/98
-----	-----	-----	-----	-----
EP 0828223 A2	11/03/98	AU 702562 B		25/02/99
		AU 3677697 A		12/03/98
		JP 10078992 A		24/03/98
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